

Claims:

1. A winder unit for use with a cutting wire in cutting out a vehicle glazing panel, the unit having:  
  
mounting means for mounting the unit;  
  
first and second winder spools for winding cutting wire; and,  
  
at least one wire wrap around guide element spaced from the winder spools and/or the mounting means.
2. A winder unit according to claim 1, wherein the wrap around guide element comprises a guide wheel or pulley rotatably mounted with respect to the unit.
3. A winder unit according to claim 1, wherein the winder spools are arranged in side by side arrangement and a respective guide wheel or pulley is positioned outwardly of each respective winder spools.
4. A winder unit according to claim 2, wherein the guide wheel is rotatably mounted relative to the unit.
5. A winder unit according to claim 1, wherein at least one of the winder spools includes a ratchet arrangement enabling spool rotation in a first direction and inhibiting spool rotation in an opposed second direction.

6. A winder unit according to claim 5, wherein the ratchet arrangement is releasable to permit spool rotation in both the first and second directions.
7. A winder unit according to claim 1, wherein the mounting means comprises on or more suction mounts.
8. A winder unit according to claim 1, wherein the unit includes four guide wheels or pulleys, to guide the wire, the guide wheels or pulleys being provided substantially at notional corners of a polygon.
9. A method of cut out of a vehicle glazing panel bonded in a frame by means of interposed bonding material, the method comprising:

setting a wire winder unit on the windscreen, the winder unit including a plurality of winder spools and at least one wire wrap around guide element positioned proximate a corner of the glazing panel;

setting a wire guide arrangement on the windscreen spaced from the wire winder unit, the wire guide arrangement including respective wire wrap around guide elements positioned proximate respective corners of the glazing panel;

looping a cutting wire about the periphery of the glazing panel and inserting first and second ends of the wire through the bonding material;

winding the wire from opposed ends by means of the winder spools.

10. A method according to claim 9, wherein the set position of the wire winder unit and the wire guide arrangement relative to the glazing panel remains substantially fixed throughout the cut out procedure.
11. A method according to claim 9, wherein the winder spools are spaced and the opposed end portions of the cutting wire are wound around respective spools, such that a wire crossover portion is created adjacent the winder spools.
12. A method according to claim 9, wherein the wire winder unit and wire guide arrangement are set on the glazing panel internally of the vehicle, the cutting wire being looped around the periphery of the glazing panel externally of the vehicle.
13. A method according to claim 9, wherein one or more wrap around guide elements comprise rotatably mounted guide wheels.
14. A method according to claim 9, wherein the wire guide arrangement includes a mounting arrangement comprising one or more suction mounts.
15. A method according to claim 9, wherein the wire winder unit includes a mounting arrangement comprising one or more suction mounts.
16. A method according to claim 9, wherein, in set up, the cutting wire passes through the bonding material at a position proximate a corner of the glazing panel.

17. A method according to claim 16, wherein, in set up, the cutting wire passes through the bonding material at a position to the same side of the glazing panel as the wire winder unit.
18. A method according to claim 17, wherein, in set up, the cutting wire passes through the bonding material at a position substantially directly below the wire winder unit.
19. A method according to claim 9, wherein the wire wrap around guide elements of the guide arrangement are positioned to the same side of the glazing panel.
20. A method according to claim 9, wherein internally of the vehicle, at set up, a longer length of cutting wire extends around the wrap around guide elements of the guide arrangement and is wound on a first winding spool of the winder unit, a shorter length of cutting wire extending around a wrap around guide element of the winder unit and being wound on a second winder spool of the winder unit.
21. (original) A method according to claim 20, wherein with the spool connected to the shorter length of wire is first wound in to effect a first cut phase; the spool connected to the longer wire length being subsequently wound in.
22. A method according to claim 9, wherein during the winding procedure a ratchet of one of the spools is released facilitating slackening or unwinding of a previously wound portion of the cutting wire.

23. A guide arrangement for use in aiding performance of a cut out method according to claim 9, wherein the guide arrangement includes a mount and a pair of positioning limbs extending from the mount at an apex defined by the proximal ends of the limbs, each said limb carrying at its distal end a respective wrap around guide element for the cutting wire.
24. A guide arrangement according to claim 23, wherein the wrap around guide elements comprise guide wheels rotatably mounted to the respective limbs.
25. A guide arrangement according to claim 23, wherein the limbs are pivotally connected to the mount such that the angle between the limbs can be varied.
26. A guide according to claim 23, wherein the limbs are pivotally connected to the mount such that the limbs can pivot in two mutually perpendicular axes.
27. A guide arrangement according to claim 26, wherein the pivotal mount comprises a ball and socket type connection.
28. A guide arrangement according to claim 23, wherein the apex mount comprises a suction mount.
29. A guide arrangement according to claim 23, wherein one or both limbs is provided with a further mount intermediate the opposed ends of the limb.
30. A guide arrangement according to claim 29, wherein the further mount comprises a suction mount.

31. A guide arrangement according to claim 29, wherein the further mount is adjustable to be secured at various positions along the length of the limb.
32. A guide arrangement according to claim 29, wherein the further mount is adjustable with respect to its angular orientation about the longitudinal axis of the limb.
33. A guide arrangement according to, claim 29 wherein the further mount is adjustable to the position of the mount below the limb.
34. Apparatus for use in cutting out a vehicle glazing panel using cutting wire, the apparatus comprising:  
a winder unit comprising:  
    mounting means for mounting the winder unit;  
    first and second winder spools for winding the cutting wire; and,  
    at least one wire wrap around guide element positioned away from the mounting means; and,  
a guide arrangement including mounting means for mounting the guide arrangement and a pair of positioning limbs extending from the mount at an apex defined by the proximal ends of the limbs, each said limb carrying at its distal end a respective wrap around guide element for the cutting wire.
35. A winder unit for use with a cutting wire in cutting out a vehicle glazing panel, the unit having:

spaced suction cup mounts for mounting the unit;

first and second winder spools for winding cutting wire; and,

at least one wire wrap around guide element spaced from the winder spools,

wherein the suction cup mounts are tiltably mounted with respect to the winder unit.